IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

ARTHROCARE CORPORATION,

Plaintiff,

C.A. No. 01-504 SLR

SMITH & NEPHEW, INC.,

v.

Defendant.

DEFENDANT SMITH & NEPHEW, INC.'S SUPPLEMENTAL RESPONSES TO PLAINTIFF ARTHROCARE CORPORATION'S INTERROGATORIES NOS. 4 AND 5

Smith & Nephew, Inc. ("Smith & Nephew") supplements its answers and objections to ArthroCare Corporation's ("ArthroCare") First Set of Interrogatories [Nos. 1-7] as follows:

GENERAL OBJECTIONS

- 1. Smith & Nephew objects to the definitions and instructions and to each interrogatory to the extent they are inconsistent with and more burdensome than the Federal Rules of Civil Procedure, the Delaware Local Rules and the orders of this Court. For example, Smith & Nephew objects to Instruction No. 11 as inconsistent with and more burdensome than the applicable rules and orders governing claims of privilege and work product for interrogatory responses. Smith & Nephew will comply with the Federal Rules of Civil Procedure, the Delaware Local Rules and the orders of this Court.
- 2. Smith & Nephew objects to each interrogatory to the extent it seeks disclosure of information protected by the attorney-client privilege, work product doctrine, or other applicable privilege or immunity. Any disclosure Smith & Nephew makes of such information is

inadvertent and does not constitute a waiver of the applicable privilege or immunity as to such information.

- 3. Smith & Nephew objects to each interrogatory to the extent it seeks disclosure of confidential information, until such time that a suitable protective order is entered in this case. It is expected that the parties will be able to agree to the terms of such a protective order without assistance from the Court, which will, inter alia, specify how confidential information is to be designated. Smith & Nephew is in the process of drafting a suitable protective order, which will be provided shortly. Smith & Nephew also objects to disclosing information that Smith & Nephew is obligated to third parties to maintain as confidential. Smith & Nephew will seek the permission of such third parties to disclose such information, once a suitable protective order is entered.
- 4. Smith & Nephew objects that the definition of "ArthroCare" is vague. Smith & Nephew will respond on the basis that the term "ArthroCare" is understood to refer to the plaintiff in this action, ArthroCare Corp., and its employees and agents.
- 5. Smith & Nephew objects that the definition of "Defendant," "Smith & Nephew," "You," and "Your" is vague and overbroad, and seeks irrelevant information not related to any claim or defense in this action. The only Smith & Nephew business unit that is involved in making and selling the accused product is the Endoscopy Division of Smith & Nephew.

 Accordingly, Smith & Nephew will respond on the basis that the terms "Defendant," "Smith & Nephew," "You," and "Your" are understood to mean Smith & Nephew's Endoscopy Division.
- 6. Smith & Nephew objects that the definition of "Relates To," "Relating To," "In Relation To," and "Related To" is overbroad, unduly burdensome, and seeks irrelevant information not related to any claim or defense in this action. Smith & Nephew will interpret these terms as meaning "constituting, containing, referring to, describing, analyzing, and discussing" and their cognates to "Relates To" and "Related To."

- 7. Smith & Nephew objects that the definition of "identify" is overbroad and unduly burdensome. Rather than provide the information requested, where an interrogatory asks that Smith & Nephew "identify" an individual, Smith & Nephew may instead provide sufficient information from which ArthroCare can contact the individual; where an interrogatory asks that Smith & Nephew "identify" a document, Smith & Nephew may instead produce the document and/or provide the production number range for the document.
- 8. Smith & Nephew objects that the definition of "Accused Device" is overbroad and unduly burdensome and seeks irrelevant information not related to any claim or defense in this action. The only products falling within ArthroCare's definition of "Accused Device" which have been introduced to the marketplace are the Dyonics Control RF Adaptor and the Dyonics Series 7000 RF RS Probe. Accordingly, Smith & Nephew will respond on the basis that the term "Accused Device" is understood to mean only the Dyonics Control RF Adaptor and the Dyonics Series 7000 RF RS Probe.
- 9. In accordance with Local Rule 26.1(b), Smith & Nephew shall count each subpart as a separate interrogatory. Smith & Nephew notes that ArthroCare's First Set of Interrogatories has numerous subparts, each of which comprises a separate interrogatory under the Federal Rules of Civil Procedure. Smith & Nephew objects to ArthroCare serving more than 35 interrogatories, thereby violating the agreed upon Scheduling Order. In order to expedite discovery, Smith & Nephew has not undertaken the task of enumerating each separate subpart contained within ArthroCare's interrogatories. If ArthroCare propounds additional interrogatories, however, Smith & Nephew will undertake such a task to ensure that ArthroCare does not exceed the numerical limit imposed by the Scheduling Order.
- 10. Discovery and analysis are ongoing in this case. Smith & Nephew reserves the right to supplement its responses as such discovery and analysis make necessary.

INTERROGATORY NO. 4

State in detail all facts upon which Defendant bases its denial of infringement of any of the Patents-In-Suit, including without limitation the Identity of the individuals with knowledge of any such facts and the Identity of all Documents and things Relating To any such facts.

RESPONSE TO INTERROGATORY NO. 4

In addition to the General Objections, Smith & Nephew also objects to this interrogatory to the extent it seeks information protected by attorney-client privilege and/or work product immunity. Smith & Nephew further objects to this interrogatory as overly broad and premature contention discovery: discovery in the case has just begun, there are more than 160 claims in the patents-in-suit, and only recently, i.e., on November 2, 2001, did ArthroCare disclose the identity of certain independent claims it is asserting, and even then, ArthroCare's claim designation was indicated to be tentative. ArthroCare still has not disclosed the identity of the dependent claims it is asserting despite having been asked to do so several times by Smith & Nephew.

Accordingly, Smith & Nephew objects to ArthroCare's attempts to take contention discovery in such a piecemeal fashion.

Further answering, Smith & Nephew notes that in its interrogatories served on October 10, 2001, and in particular in Interrogatory Nos. 1-3, Smith & Nephew asked ArthroCare to identify the asserted claims and to provide its contentions as to claim construction. ArthroCare has requested an extension until December 10, 2001 to respond to these interrogatories.

Accordingly, Smith & Nephew reserves its right to supplement its response to this interrogatory once ArthroCare answers Smith & Nephew's interrogatories, and as discovery proceeds.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 4

In addition to the information provided in response to this interrogatory and subject to and without waiving the general and specific objections therein, and based on the information currently available to it, Smith & Nephew supplements its response as follows: Smith & Nephew further objects to this interrogatory as being premature in light of the current status of this case, as discovery has just begun, ArthroCare has produced almost no confidential documents to Smith & Nephew, expert discovery in this case has not begun, and initial expert reports are not due until September 13, 2002.

Smith & Nephew also objects to this interrogatory on the grounds that ArthroCare has improperly refused to respond to Smith & Nephew's interrogatory requesting that ArthroCare identify how the asserted claims of the patents-in-suit should be construed on the grounds that any interrogatory requesting such information is purportedly superseded by the Court's scheduling order in this case. Arthrocare is wrong. The court's decision to set a date for exchange of final claim construction contentions does not relieve Arthrocare of its responsibility to timely respond to relevant discovery directed to Arthrocare's claim construction contentions. As clearly set forth in Smith & Nephew's initial response, Smith & Nephew indicated that it would supplement its response to this interrogatory once ArthroCare provided its contentions as to claim construction as requested in Smith & Nephew's interrogatories. However, ArthroCare has refused to do so. Smith & Nephew further objects to this interrogatory on the grounds that ArthroCare has failed to meaningfully respond to Smith & Nephew's interrogatory seeking ArthroCare's infringement contentions. It is manifestly unfair, as well as nonsensical since ArthroCare bears the burden of proof on the issue, for ArthroCare to demand Smith & Nephew's

non-infringement contentions without first providing meaningful responses to Smith & Nephew's interrogatory seeking ArthroCare's infringement contentions. Accordingly, Smith & Nephew reserves its right to supplement its response to this interrogatory once ArthroCare answers Smith & Nephew's interrogatories, and as discovery proceeds.

INTERROGATORY NO. 5

State in detail all facts upon which Defendant bases its allegation that any of the Patents-In-Suit are invalid, including without limitation the Identity of the individuals with knowledge of any such facts and the Identity of all Documents and things Relating To any such facts.

RESPONSE TO INTERROGATORY NO. 5

In addition to the General Objections, Smith & Nephew also objects to this interrogatory to the extent it seeks information protected by attorney-client privilege and/or work product immunity. Smith & Nephew further objects to this interrogatory as overly broad and premature contention discovery: discovery in the case has just begun, there are more than 160 claims in the patents-in-suit, and only recently, i.e., on November 2, 2001, did ArthroCare disclose the identity of certain independent claims it is asserting, and even then, ArthroCare's claim designation was indicated to be tentative. ArthroCare still has not disclosed the identity of the dependent claims it is asserting despite having been asked to do so several times by Smith & Nephew.

Accordingly, Smith & Nephew objects to ArthroCare's attempts to take contention discovery in such a piecemeal fashion.

Further answering, Smith & Nephew notes that in its interrogatories served on October 10, 2001, and in particular in Interrogatory Nos. 1-3, Smith & Nephew asked ArthroCare to identify the asserted claims and to provide its contentions as to claim construction. In addition, in Interrogatory Nos. 4, 5, 7, and 12, and in its First Request For Production And Things, Smith & Nephew asked ArthroCare to provide certain information regarding the subject matter of this interrogatory. ArthroCare has requested an extension until December 10, 2001 to respond to these interrogatories and requests for production. Accordingly, Smith & Nephew reserves its

right to supplement its response to this interrogatory once ArthroCare provides its responses to Smith & Nephew's interrogatories and requests for production, and as discovery proceeds.

Subject to its objections and without waiving any objection, Smith & Nephew responds as follows:

As of the present time, Smith & Nephew contends that the asserted claims are invalid for at least the same reasons as, and to the same extent as, set forth in Judge Orrick's Memorandum Decision and Order of December 1, 1998 in the case of Arthrocare Corp. v. Ethicon. Inc., Civil Action No. C-98-0609-WHO (N.D. Cal.)

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 5

In addition to the information provided in response to this interrogatory and subject to and without waiving the general and specific objections therein, and based on the information currently available to it, Smith & Nephew supplements its response as follows: Smith & Nephew further objects to this interrogatory as being premature in light of the current status of this case, as discovery has just begun, ArthroCare has produced almost no confidential documents to Smith & Nephew, expert discovery in this case has not begun, and initial expert reports are not due until September 13, 2002. Smith & Nephew further objects to this interrogatory on the grounds that ArthroCare has refused to identify how the asserted claims of the patents-in-suit should be construed. Smith & Nephew's discovery and investigation are ongoing. Smith & Nephew reserves the right to supplement and/or modify this response as additional material or information become available.

Subject to these objections, Smith & Nephew states that it may rely on one or more of the following references (or others to be identified later) to support Smith & Nephew's prior art invalidity defenses under 35 U.S.C. §§ 102 and 103 for each of the asserted claims set forth in Jared Bobrow's letter of November 2, 2001. Smith & Nephew is continuing to evaluate the

relevant prior art and, if necessary, will provide additional detail on its contentions at an appropriate later date.

U.S. Patent No. 5,697,536: Claim 45

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION		TITLE
08/16/33	US 2,056,377	F.C. Wappler	Electronic Instrument
05/00/69	Bio-Medical Engineering 206-216	A.K. Dobbie	The Electrical Aspects of Surgical Diathermy
06/11/74	US 3,815,604	Conor C. O'Malley, Ralph M. Heintz, Sr.	Apparatus For Intraocular Surgery
08/26/75	US 3,901,242	Karl Storz	Electric Surgical Instrument
00/00/76	Acta Medicotechnica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 – 134	E. Elsasser and E. Roos	Uber ein Instrument zur leckstromfreien transurethralen Resection (Concerning An Instrument for Transurethral resection without leakage of current)
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor
01/07/77	2 313 949/ N 76 17587	Siegfried Hiltebrandt et Ludwig Bonnet	Boucle de sectionnement a une ou deux branches pour resertoscope
00/00/78	Gastroenterology, Vol. 74, No. 3, 527- 534, 1978	J.R.A. Piercey, M.D., D.C. Auth, Ph.D, P.E., F.E. Silverstein, M.D., H.R. Willard, Ph.D, M.B. Dennis, D.V.M., D.M. Ellefson, B.S., D.M. Davis, M.S.E.E., R.L. Protell, M.D. and C.E. Rubin, M.D.	Electrosurgical Treatment of Experimental Bleeding Canine Gastric Ulcers: Development and testing of a computer control and a better electrode
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
11/00/79	Digestive Diseases and Sciences, Vol. 24, No. 11, 845-848	M.B. Dennis, J. Peoples, R. Hulett, D.C. Auth, R.L. Protell, C.E. Rubin, and F.E. Silverstein	Evolution of Electrofulguration in Control of Bleeding of Experimental Gastric Ulcers
01/01/80	US 4,181,131		High Frequency Electrosurgical Instrument

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	
			for Cutting Human Body Cavity Structures
01/22/80	US 4,184,492	Hans H. Meinke, Gerhard Flachenecker, Karl Fastenmeier, Friedrich Landstorfer, Heinz Lidenmeier	Safety Circuitry for High Frequency Cutting and Coagulating Devices
11/11/80	US 4,232,676	Andrew Herczog	Surgical Cutting Instrument
02/03/81	US 4,248,231	Andrew Herczog and James A. Murphy	Surgical Cutting Instrument
02/00/82	CRC Press, American Heart Journal, Vol. 117, 332-341	Kevin J. Barry, MS, Jonathan Kaplan, MD, Raymond J. Connolly, Ph.D, Paul Nardella, BS, Benjamin L Lee, MD, Gary J. Becker, MD, Bruce F. Waller, MD,	The effect of radiofrequency-generated thermal energy on the mechanical and histologic characteristics of the arterial wall in vivo: Implications for
04/27/82	US 4,326,529	and Allan D. Callow, MD, Ph.D James D. Doss and	radiofrequency angioplasty Comeal-Shaping Electrode
04/26/83	US 4,381,007	Richard L. Hutson James D. Doss	Multipolar Corneal- Shaping Electrode with Flexible Removable Skirt
00/00/85	Urological Research 13:99-102	J.W.A. Ramsay, N.A. Shepherd, M. Butler, P.T. Gosling, R.A. Miller, D.M.A. Wallace, H.N. Whitfield	A Comparison of Bipolar and Monopolar Diathermy Probes in Experimental Animals
06/00/85	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurbiers, BSc, Nicolaas Bom, Ph.D, Patrick W. Serruys, MD, Geert T. Meester, MD, FACC	Vaporization of Atherosclerotic Plaques by Spark Erosion
05/27/86	US 4,590,934	Jerry L. Malis, Leonard I. Malis, Robert R. Acorcey, David Solt	Bipolar Cutter/Coagulator
06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
00/00/89	The Organizing	Robert Tucker and	A Bipolar Electrosurgical

ISSUE/			
PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
·	Committee of the 7 th World Congress on Endourology and ESWL Foundation for Advancement of International Science	Stefan Loening	Turp Loop
02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy
03/00/89	Journal of Urology Vol. 141, 662-665	Robert D. Tucker, Eugene V. Kramolowsky, Eric Bedell and Charles E. Platz	A Comparison of Urologic Application of Bipolar Versus Monopolar Five French Electrosurgical Probes
04/00/89	JACC Vol. 13 No. 5, 1167-75	Benjamin I. Lee, MD, FACC, Gary J. Becker, MD, Bruce F. Waller, MD, FACC, Kevin J. Barry, MS, Raymond J. Connolly, Ph.D, Jonathan Kaplan, MD, Alan R. Shapiro, MS, Paul C. Nardella, BS	Thermal Compression and Molding of Atherosclerotic Vascular Tissue With Use of Radiofrequency Energy: Implications for Radiofrequency Balloon Angioplasty
04/25/89	US 4,823,791	Frank D. D'Amelio, Dawn M. DeLemos, Dominick G. Esposito, Michelle D. Maxfield, Claude E. Petruzzi, Robert H. Quint	Electrosurgical Probe Apparatus
00/00/90	Urological Research 18:291-294	R.D. Tucker, E.V. Kramolowsky, and C.E. Platz	In vivo effect of 5 French bipolar and monopolar electrosurgical probes on the porcine bladder
02/00/90	Journal of Urology Vol. 143, 275-277	Eugene V. Kramolowsky and Robert D. Tucker	Use of 5F Bipolar Electrosurgical Probe in Endoscopic Urological Procedures
04/05/90	WO 90/03152	John Considine, John Colin	Electro-surgical Apparatus for Removing Tumours from Hollow Organs of the Body

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
05/01/90	US 4,920,978	David P. Colvin	Method and Apparatus for the Endoscopic Treatment of Deep Tumors Using RF Hyperthermia
06/05/90	US 4,931,047	Alan Broadwin, Charles Vassallo, Joseph N. Logan, Robert W. Hornlein	Method and Apparatus For Providing Enhanced Tissue Fragmentation And/Or Hemostasis
12/11/90	US 4,976,711	David J. Parins, Mark A. Rydell, Peter Stasz	Ablation Catheter With Selectively Deployable Electrodes
12/25/90	US 4,979,948	Lesslie A. Geddes, Marvin H. Hinds, Joe D. Bourland, William D. Voorhees	Method and Apparatus for Thermally Destroying A Layer of An Organ
03/21/91	DE 3930451 A1	Ellen Hoffmann, Gerhard, Steinbeck, Rudi Mattmuller	Vorrichtung für die Hochfrequenzkoagulation von biologischem Gewebe
04/16/91	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument Having Needle Cutting Electrode And Spot-Coag Electrode
04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical Instrument
07/30/91	US 5,035,696	Mark A. Rydeli	Electrosurgical Instrument for Conducting Endoscopic Retrograde Sphincterotomy
09/00/91	Journal of Urology Vol. 146, 669	Eugene V. Kramolowsky and Robert D. Tucker	The Urological Application of Electrosurgery
09/10/91	US 5,047,027	Mark A. Rydell	Tumor Resector
10/07/91	Bipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsen	Bipolar Laparoscopic Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/04/92	US 5,085,659	Mark A. Rydell	Biopsy Device With Bipolar Coagulation Capability
02/18/92	US 5,088,997	Louis Delahuerga, Robert B. Stoddard, Michael S. Klicek	Gas Coagulation Device

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
06/16/92	U\$ 5,122,138	Kim H. Manwaring	Tissue Vaporizing Accessory and Method for an Endoscope
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus
12/15/92	US 5,171,311	Mark A. Rydell, David J. Parins, Steven W. Berhow	Percutaneous Laparoscopic Cholectectomy Instrument
05/04/93	US 5,207,675	Jerome Canady	Surgical Coagulation Device
06/08/93	US 5,217,459	William Kamerling	Method and Instrument for Performing Eye Surgery
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	ÚS 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

In addition, Smith & Nephew may rely on the findings of fact made by Judge William H.

Orrick in his Memorandum Decision and Order dated December 1, 1998, in which he found that

"every element of claim 45 of the '536 patent... appear[s] in the Roos '198 patent." Smith &

Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

U.S. Patent No. 5,697,882; Claim 1

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
08/16/33	US 2,056,377	F.C. Wappler	Electronic Instrument
05/00/69	Bio-Medical Engineering 206-216	A.K. Dobbie .	The Electrical Aspects of Surgical Diathermy

08/26/75	US 3,901,242	Karl Storz	
	3,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Kail SiQ(2	Electric Surgical Instrument
06/11/74	US 3,815,604	Conor C. O'Malley,	
		Ralph M. Heintz, Sr.	Apparatus For Intraocular Surgery
00/00/76	Acta Medicotechnica	E. Elsasser and E. Roos	Uber ein Instrument zur
	(Medizinal-Markt),		leckstromfreien
	Vol. 24, No. 4, 1976		transurethralen Resection
:[129 - 134		(Concerning An
			Instrument for
			transurethral resection
		1	without leakage of cutteril)
02/24/76	U\$ 3,939,839	Lawrence E. Curtiss	Resectoscope and
			Electrode Therefor
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices
			Having Sesquipolar
			Electrode Structures
01/07/77	0.210.020		Incorporated Therein
01/0////	2 313 949/ N 76 17587	Siegfried Hiltebrandt et	Boucle de sectionnement a
	14 /0 1/38/	Ludwig Bonnet	une ou deux branches pour
02/21/78	11C 4 074 710		resertoscope
09/26/78	US 4,074,718 US 4,116,198	Charles F. Morrison, Jr.	Electrosurgical Instrument
11/00/79	Digestive Diseases	Eberhard Roos	Electro-Surgical Device
11/00/17	and Sciences, Vol. 24,	M.B. Dennis, J. Peoples,	Evolution of
	No. 11, 845-848	R. Hulett, D.C. Auth, R.L. Protell, C.E. Rubin,	Electrofulguration in
	110. 11, 043-040	and F.E. Silverstein	Control of Bleeding of
		and r.E. Silverstein	Experimental Gastric Ulcers
01/01/80	US 4,181,131	Hisao Ogiu	High Frequency
		Talloud Ogita	Electrosurgical Instrument
			for Cutting Human Body
			Cavity Structures
01/22/80	US 4,184,492	Hans H. Meinke,	Safety Circuitry for High
1		Gerhard Flachenecker,	Frequency Cutting and
		Karl Fastenmeier,	Coagulating Devices
		Friedrich Landstorfer,	
4/25/05	100	Heinz Lidenmeier	
4/27/82	US 4,326,529	James D. Doss and	Corneal-Shaping Electrode
04/26/92	100 4 000 000	Richard L. Hutson	
04/26/83	US 4,381,007	James D. Doss	Multipolar Corneal-
		İ	Shaping Electrode with
00/00/84	Gut 25 1424 1421	G.D. 6	Flexible Removable Skirt
00/00/04	Gut, 25, 1424-1431	C.P. Swain, TN Mills, E.	Which Electrode? A
		Shemesh, Julia M. Dark,	comparison of four
	*	M.R. Lewin, J.S.	endoscopic methods of
		Clifton, T.C. Northfield,	electrocoagulation in

	T	P.B. Cotton, and P.R.	
		Salmon	experimental bleeding
00/00/85	Urological Research	J.W.A. Ramsay, N.A.	A Comparison of Bipolar
	13:99-102	Shepherd, M. Butler,	and Monopolar Diathermy
	10000	P.T. Gosling, R.A.	Probes in Experimental
		Miller, D.M.A. Wallace,	Animals
		H.N. Whitfield	Vimilais
06/00/85	JACC Vol. 5, No. 6,	Cornelis J. Slager, MSc,	Vaporization of
	1382-6	Catharina E. Essed, MD,	Atherosclerotic Plaques by
		Johan C.H. Schuurbiers,	Spark Erosion
		BSc, Nicolaas Born,	
		Ph.D, Patrick W.	
		Serruys, MD, Geert T.	
	<u> </u>	Meester, MD, FACC	
10/22/85	US 4,548,207	Harry G. Reimels	Disposable Coagulator
05/27/86	US 4,590,934	Jerry L. Malis, Leonard	Bipolar Cutter/Coagulator
,		I. Malis, Robert R.	ł.
00/00/03	 	Acorcey, David Solt	
00/00/87	Kardiologie,	C.J. Slager, A.C. Phaff,	Spark Erosion of
	Kardiol.76: Supp. 6.	C.E. Essed, J.C.H.	Arteriosclerotic Plaques
	67-71 (1987)	Schuurbiers, N. Bom,	
		V.A. Vandenbroucke,	İ
4/28/87	US 4,660,571	and P.W. Serruys Stanley R. Hess, Terri	Percutaneous Lead Having
4/20/01	03 4,000,371	Kovacs	,
		NOTAGS	Radially Adjustable Electrode
06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
00/00/89	The Organizing	Robert Tucker and	A Bipolar Electrosurgical
	Committee of the 7th	Stefan Loening	Turp Loop
	World Congress on		Vp = 0.0p
	Endourology and		
	ESWL Foundation for		
	Advancement of		
	International Science		
00/00/89	SPIE Vol. 1068	Paul C. Nardella	Radio Frequency Energy
	Catheter-based		and Impedance Feedback
	Sensing and Imaging		-
	Technology		
02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for
02/21/89		David S.C. Pao	Ophthalmic Surgery and
02/21/89		David S.C. Pao	Ophthalmic Surgery and Methods of Performing
·	US 4,805,616		Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy
02/21/89	US 4,805,616 Journal of Urology	Robert D. Tucker,	Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy A Comparison of Urologic
·	US 4,805,616		Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy

		Bedell and Charles E. Platz	French Electrosurgical Probes
04/00/89	JACC Vol. 13 No. 5, 1167-75	Benjamin I. Lee, MD, FACC, Gary J. Becker, MD, Bruce F. Waller, MD, FACC, Kevin J. Barry, MS, Raymond J. Connolly, Ph.D. Jonathan Kaplan, MD, Alan R. Shapiro, MS, Paul C. Nardella, BS	Thermal Compression and Molding of Atherosclerotic Vascular Tissue With Use of Radiofrequency Energy: Implications for Radiofrequency Balloon Angioplasty
00/00/90	Urological Research 18:291-294	R.D. Tucker, E.V. Kramolowsky, and C.E. Platz	In vivo effect of 5 French bipolar and monopolar electrosurgical probes on the porcine bladder
02/00/90	Journal of Urology Vol. 143, 275-277	Eugene V. Kramolowsky and Robert D. Tucker	Use of 5F Bipolar Electrosurgical Probe in Endoscopic Urological Procedures
04/05/90	WO 90/03152	John Considine, John Colin	Electro-surgical Apparatus for Removing Turnours from Hollow Organs of the Body
06/05/90	US 4,931,047	Alan Broadwin, Charles Vassallo, Joseph N. Logan, Robert W. Hornlein	Method and Apparatus For Providing Enhanced Tissue Fragmentation And/Or Hemostasis
06/26/90	US 4,936,281	Peter Stasz	Ultrasonically Enhanced RF Ablation Catheter
12/11/90	US 4,976,711	David J. Parins, Mark A. Rydell, Peter Staaz	Ablation Catheter With Selectively Deployable Electrodes
12/25/90	US 4,979,948	Lesslie A. Geddes, Marvin H. Hinds, Joe D. Bourland, William D. Voorhees	Method and Apparatus for Thermally Destroying A Layer of An Organ
04/16/91	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument Having Needle Cutting Electrode And Spot-Coag Electrode
04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical Instrument
07/30/91	U\$ 5,035,696	Mark A. Rydell	Electrosurgical Instrument for Conducting Endoscopic Retrograde

			Sphincterotomy
09/00/91	Journal of Urology	Eugene V.	The Urological
	Vol. 146, 669	Kramolowsky and	Application of
		Robert D. Tucker	Electrosurgery
09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement
			For Tunneling Through
			Tissue
09/10/91	US 5,047,027	Mark A. Rydell	Tumor Resector
10/07/91	Bipolar Laparoscopic	Dr. Olsen	Bipolar Laparoscopic
	Cholecystectomy		Cholecystectomy
	Lecture		1
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/18/92	US 5,088,997	Louis Delahuerga,	Gas Coagulation Device
		Robert B. Stoddard,	
		Michael S. Klicek	
03/24/92	U\$ 5,098,431	Mark A. Rydell	RF Ablation Catheter
04/28/92	US 5,108,391	Gerhard Flachenecker,	High-Frequency Generator
		Karl Fastenmeier, Heinz	For Tissue Cutting And
]	Lindenmeier	For Coagulating In High-
			Frequency Surgery
05/12/92	US 5,112,330	Shinichi Nishigaki,	Resectoscope Apparatus
		Shiro Bito	
06/16/92	US 5,122,138	Kim H. Manwaring	Tissue Vaporizing
			Accessory and Method for
10101100			an Endoscope
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo	Blood Coagulating
10/15/00	17000000	Ninomiya	Apparatus
12/15/92	US 5,171,311	Mark A. Rydell, David	Percutaneous Laparoscopic
		J. Parins, Steven W.	Cholectectomy Instrument
03/30/93	US 5,197,963	Berhow	
C5130155	03 3,197,963	David J. Parins	Electrosurgical Instrument
			with Extendable Sheath for
04/26/94	US 5,306,238	Richard P. Fleenor	Irrigation and Aspiration Laparoscopic
04/20/94	03 3,300,238	Richard F. Ficehor	
06/13/95	US 5,423,882	Maria M. Jackson	Electrosurgical Pencil
00/13/93	08 3,423,862	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode with Annular Recess and
		witton w. webster, Jr.	
10/03/95	US 5,454,809	Michael Teneses	Method of Using Same
10/03/93	03 3,434,809	Michael Janssen	Electrosurgical Catheter And Method For
			Resolving Artherosclerotic
			Plaque By Radio
			Frequency Sparking
			Frequency Sparking

Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

U.S. Patent No. 5,697,882: Claim 26

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
05/00/69	Bio-Medical Engineering 206-216	A.K. Dobbie	The Electrical Aspects of Surgical Diathermy
08/16/33	US 2,056,377	F.C. Wappler	Electronic Instrument
06/11/74	US 3,815,604	Conor C. O'Malley, Ralph M. Heintz, Sr.	Apparatus For Intraocular Surgery
08/13/74	US 3,828,780	Charles F. Morrison, Jr.	Combined Electrocoagulator-Suction Instrument
01/00/75	IEEE Transactions On Biomedical Engineering	William M. Honig	The Mechanism of Cutting in Electrosurgery
08/26/75	US 3,901,242	Karl Storz	Electric Surgical Instrument
11/18/75	US 3,920,021	Siegfried Hiltebrandt	Coagulating Devices
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
00/00/76	Acta Medicotechnica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 – 134	E. Elsasser and E. Roos	Uber ein Instrument zur leckstromfreien transurethralen Resection (Concerning An Instrument for transurethral resection without leakage of current)
01/07/77	2 313 949/ N 76 17587	Siegfried Hiltebrandt et Ludwig Bonnet	Boucle de sectionnement a une ou deux branches pour resertoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
. 06/06/78	US 4,092,986	Max Schneiderman	Constant Output Electrosurgical Unit
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
11/00/79	Digestive Diseases and Sciences, Vol. 24, No. 11, 845-848	M.B. Dennis, J. Peoples, R. Hulett, D.C. Auth, R.L. Protell, C.E. Rubin, and F.E. Silverstein	Evolution of Electrofulguration in Contro of Bleeding of Experimental Gastric Ulcers
01/01/80	US 4,181,131	Hisao Ogiu	High Frequency

	<u> </u>	·	
			Electrosurgical Instrument for Cutting Human Body Cavity Structures
01/22/80	US 4,184,492	Hans H. Meinke, Gerhard Flachenecker, Karl Fastenmeier, Friedrich Landstorfer, Heinz Lidenmeier	Safety Circuitry for High Frequency Cutting and Coagulating Devices
04/27/82	US 4,326,529	James D. Doss and Richard L. Hutson	Comeal-Shaping Electrode
04/26/83	US 4,381,007	James D. Doss	Multipolar Corneal-Shaping Electrode with Flexible Removable Skirt
00/00/84	Gut, 25, 1424-1431	C.P. Swain, TN Mills, E. Shemesh, Julia M. Dark, M.R. Lewin, J.S. Clifton, T.C. Northfield, P.B. Cotton, and P.R. Salmon	Which Electrode? A comparison of four endoscopic methods of electrocoagulation in experimental bleeding ulcers
00/00/85	Urological Research 13:99-102	J.W.A. Ramsay, N.A. Shepherd, M. Butler, P.T. Gosling, R.A. Miller, D.M.A. Wallace, H.N. Whitfield	A Comparison of Bipolar and Monopolar Diathermy Probes in Experimental Animals
06/00/85	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurbiers, BSc, Nicolaas Born, Ph.D, Patrick W. Serruys, MD, Geert T. Meester, MD, FACC	Vaporization of Atherosclerotic Plaques by Spark Erosion
10/22/85	US 4,548,207	Harry G. Reimels	Disposable Coagulator
05/27/86	US 4,590,934	Jerry L. Malis, Leonard I. Malis, Robert R. Acorcey, David Solt	Bipolar Cutter/Coagulator
00/00/87	Kardiologie, Kardiol.76: Supp. 6, 67-71 (1987)	C.J. Slager, A.C. Phaff, C.E. Essed, J.C.H. Schuurbiers, N. Born, V.A. Vandenbroucke, and P.W. Serruys	Spark Erosion of Arteriosclerotic Plaques
4/28/87	US 4,660,571	Stanley R. Hess, Terri Kovacs	Percutaneous Lead Having Radially Adjustable Electrode
06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
07/00/88	Valleylab Part	Valleylab, Inc.	Surgistat Service Manual

	Number 945 100 102 A		
00/00/89	SPIE Vol. 1068 Catheter-based Sensing and Imaging Technology	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback
00/00/89	The Organizing Committee of the 7 th World Congress on Endourology and ESWL Foundation for Advancement of International Science	Robert Tucker and Stefan Loening	A Bipolar Electrosurgical Turp Loop
03/00/89	Journal of Urology Vol. 141, 662-665	Robert D. Tucker, Eugene V. Kramolowsky, Eric Bedell and Charles E. Platz	A Comparison of Urologic Application of Bipolar Versus Monopolar Five French Electrosurgical Probes
02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy
04/00/89	JACC Vol. 13 No. 5, 1167-75	Benjamin I. Lee, MD, FACC, Gary J. Becker, MD, Bruce F. Waller, MD, FACC, Kevin J. Barry, MS, Raymond J. Connolly, Ph.D, Jonathan Kaplan, MD, Alan R. Shapiro, MS, Paul C. Nardella, BS	Thermal Compression and Molding of Atherosclerotic Vascular Tissue With Use of Radiofrequency Eneergy: Implications for Radiofrequency Balloon Angioplasty
00/00/90	Urological Research 18:291-294	R.D. Tucker, E.V. Kramolowsky, and C.E. Platz	In vivo effect of 5 French bipolar and monopolar electrosurgical probes on the porcine bladder
02/00/90	Journal of Urology Vol. 143, 275-277	Eugene V. Kramolowsky and Robert D. Tucker	Use of 5F Bipolar Electrosurgical Probe in Endoscopic Urologiical Procedures
04/05/90	WO 90/03152	John Considine, John Colin	Electro-surgical Apparatus for Removing Tumours from Hollow Organs of the Body
06/05/90	US 4,931,047	Alan Broadwin, Charles Vassallo, Joseph N. Logan, Robert W.	Method and Apparatus For Providing Enhanced Tissue Fragmentation And/Or

		Homlein	Hemostasis
06/26/90	US 4,936,281	Peter Stasz	Ultrasonically Enhanced RF Ablation Catheter
12/11/90	US 4,976,711	David J. Parins, Mark A. Rydell, Peter Stasz	Ablation Catheter With Selectively Deployable Electrodes
12/25/90	US 4,979,948	Lesslie A. Geddes, Marvin H. Hinds, Joe D. Bourland, William D. Voorhees	Method and Apparatus For Thermally Destroying A Layer Of An Organ
04/16/91	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument Having Needle Cutting Electrode And Spot-Coag Electrode
04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical Instrument
07/30/91	US 5,035,696	Mark A. Rydell	Electrosurgical Instrument For Conducting Endoscopic Retrograde Sphincterotomy
09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement For Tunneling Through Tissue
09/10/91	US 5,047,027	Mark A. Rydell	Tumor Resector
09/00/91	Journal of Urology Vol. 146, 669	Eugene V. Kramolowsky and Robert D. Tucker	The Urological Application of Electrosurgery
10/07/91	Bipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsen	Bipolar Laparoscopic Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/18/92	US 5,088,997	Louis Delahuerga, Robert B. Stoddard, Michael S. Klicek	Gas Coagulation Device
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
04/28/92	US 5,108,391	Gerhard Flachenecker, Karl Fastenmeier, Heinz Lindenmeier	High-Frequency Generator For Tissue Cutting And For Coagulating In High- Frequency Surgery
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
06/16/92	US 5,122,138	Kim H. Manwaring	Tissue Vaporizing Accessory and Method for an Endoscope
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus

12/15/92	US 5,171,311	Mark A. Rydell, David J. Parins, Steven W. Berhow	Percutaneous Laparoscopic Cholectectomy Instrument
03/30/93	US 5,197,963	David J. Parins	Electrosurgical Instrument with Extendable Sheath for Irrigation and Aspiration
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

In addition, Smith & Nephew may rely on the findings of fact made by Judge William H.

Orrick in his Memorandum Decision and Order dated December 1, 1998, in which he found that there was "a substantial question to whether claim 26 of the '882 patent is invalid for obviousness in light of the Roos '198 patent and the Elsasser and Roos article." Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

U.S. Patent No. 5,697,882: Claim 28

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
08/16/33	U\$ 2,056,377	F.C. Wappler	Electronic Instrument
08/26/75	US 3,901,242	Karl Storz	Electric Surgical Instrument
11/18/75	US 3,920,021	Siegfried Hiltebrandt	Coagulating Devices
00/00/76	Acta Medicotechnica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 – 134	E. Elsasser and E. Roos	Uber ein Instrument zur leckstromfreien transurethralen Resection (Concerning An Instrument for Transurethral resection without leakage of current)
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor

07/0A/MZ	110 2 000 000	1.00	
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
01/07/77	2 313 949/ N 76 17587	Siegfried Hiltebrandt et Ludwig Bonnet	Boucle de sectionnement a une ou deux branches pour resertoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
01/01/80	US 4,181,131	Hisao Ogiu	High Frequency Electrosurgical Instrument for Cutting Human Body Cavity Structures
01/22/80	US 4,184,492	Hans H. Meinke, Gerhard Flachenecker, Karl Fastenmeier, Friedrich Landstorfer, Heinz Lidenmeier	Safety Circuitry for High Frequency Cutting and Coagulating Devices
02/00/82	CRC Press, American Heart Journal, Vol. 117, 332-341	Kevin J. Barry, MS, Jonathan Kaplan, MD, Raymond J. Connolly, Ph.D, Paul Nardella, BS, Benjamin L Lee, MD, Gary J. Becker, MD, Bruce F. Waller, MD, and Allan D. Callow, MD, Ph.D	The effect of radiofrequency- generated thermal energy on the mechanical and histologic characteristics of the arterial wall in vivo: Implications for radiofrequency angioplasty
4/27/82	US 4,326,529	James D. Doss and Richard L. Hutson	Corneal-Shaping Electrode
04/26/83	US 4,381,007	James D. Doss	Multipolar Corneal-Shaping Electrode with Flexible Removable Skirt
00/00/84	Gut, 25, 1424-1431	C.P. Swain, TN Mills, E. Shemesh, Julia M. Dark, M.R. Lewin, J.S. Clifton, T.C. Northfield, P.B. Cotton, and P.R. Salmon	Which Electrode? A comparison of four endoscopic methods of electrocoagulation in experimental bleeding ulcers
10/22/85	US 4,548,207	Harry G. Reimels	Disposable Coagulator
00/00/85	Urological Research 13:99-102	J.W.A. Ramsay, N.A. Shepherd, M. Butler, P.T. Gosling, R.A. Miller, D.M.A. Wallace,	A Comparison of Bipolar and Monopolar Diathermy Probes in Experimental Animals
06/00/85		H.N. Whitfield	

		1382-6	Catharina E. Essed, MD, Johan C.H. Schuurbiers,	Atherosclerotic Plaques by Spark Erosion
			BSc, Nicolaas Bom, Ph.D, Patrick W.	
			Serruys, MD, Geert T.]
L			Meester, MD, FACC	
	05/27/86	US 4,590,934	Jerry L. Malis, Leonard	Bipolar Cutter/Coagulator
			I. Malis, Robert R.	·
_	00100105	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Acorcey, David Solt	
	00/00/87	Kardiologie, Kardiol.76: Supp. 6,	C.J. Slager, A.C. Phaff, C.E. Essed, J.C.H.	Spark Erosion of
	•	67-71 (1987)	Schuurbiers, N. Born.	Arteriosclerotic Plaques
		01 71 (1507)	V.A. Vandenbroucke,	
			and P.W. Serruys	İ
	04/28/87	US 4,660,571	Stanley R. Hess, Terri	Percutaneous Lead Having
			Kovacs	Radially Adjustable Electrode
	06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
	03/00/89	Journal of Urology	Robert D. Tucker,	A Comparison of Urologic
		Vol. 141, 662-665	Eugene V.	Application of Bipolar Versus
			Kramolowsky, Eric	Monopolar Five French
			Bedell and Charles E.	Electrosurgical Probes
	00/00/00		Platz	
1	00/00/89	SPIE Vol. 1068	Paul C. Nardella	Radio Frequency Energy and
		Catheter-based ensing and Imaging		Impedance Feedback
		Technology	ĺ	
	00/00/89	The Organizing	Robert Tucker and	A Bipolar Electrosurgical Turp
		Committee of the 7th	Stefan Loening	Loop
		World Congress on		•
		Endourology and	•	
		ESWL Foundation for		
		Advancement of		
	02/21/90	International Science	5 1166 5	
	02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for Ophthalmic
		•		Surgery and Methods of Performing Anterior
				Capsulotomy
10	04/00/89	JACC Vol. 13 No. 5,	Benjamin I. Lee, MD,	Thermal Compression and
		1167-75	FACC, Gary J. Becker,	Molding of Atheroseleratic
			MD, Bruce F. Waller,	Vascular Tissue With Use of
			MD, FACC, Kevin J.	Radiofrequency Energy:
			Barry, MS, Raymond J.	Implications for
			Connolly, Ph.D,	Radiofrequency Balloon
			Jonathan Kaplan, MD,	Angioplasty
			Alan R. Shapiro, MS,	

		David C Nordall DC	
05/23/89	110 4 922 049	Paul C. Nardella, BS	
	US 4,832,048	Donald Cohen	Suction Ablation Catheter
00/00/90	Urological Research	R.D. Tucker, E.V.	In vivo effect of 5 French
	18:291-294	Kramolowsky, and C.E.	bipolar and monopolar
}		Platz	electrosurgical probes on the
			porcine bladder
02/00/90	Journal of Urology	Eugene V.	Use of 5F Bipolar
	Vol. 143, 275-277	Kramolowsky and	Electrosurgical Probe in
4		Robert D. Tucker	Endoscopic Urologiical
			Procedures
04/05/90	WO 90/03152	John Considine, John	Electro-surgical Apparatus for
		Colin	Removing Tumours from
			Hollow Organs of the Body
05/01/90	US 4,920,978	David P. Colvin	Method and Apparatus for the
	1		Endoscopic Treatment of Deep
			Tumors Using RF
			Hyperthermia
06/26/90	US 4,936,281	Peter Stasz	Ultrasonically Enhanced RF
			Ablation Catheter
10/30/90	US 4,966,597	Eric R. Cosman	Thermometric Cardiac Tissue
			Ablation Electrode with Ultra-
			Sensitive Temperature
			Detection
12/11/90	US 4,976,711	David J. Parins, Mark A.	Ablation Catheter With
		Rydell, Peter Stasz	Selectively Deployable
10/04/04			Electrodes
12/25/90	US 4,979,948	Lesslie A. Geddes,	Method and Apparatus for
		Marvin H. Hinds, Joe D.	Thermally Destroying A Layer
•		Bourland, William D.	of An Organ
09/00/91	Tourne) of The land	Voorhees	
ו ליוטטוכט	Journal of Urology	Eugene V.	The Urological Application of
	Vol. 146, 669	Kramolowsky and	Electrosurgery
04/16/91	110 5 000 000	Robert D. Tucker	
V-1 (W)	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument
		<u> </u>	Having Needle Cutting
			Electrode And Spot-Coag
04/23/91	US 5,009,656	Hama C. Daimala	Electrode
VII & JI J I	טכט,כטט,כ טט	Harry G. Reimels	Bipolar Electrosurgical
07/30/91	US 5,035,696	Mark A Daylett	Instrument
OH2WAT	סעס,נכט,נ פט	Mark A. Rydell	Electrosurgical Instrument for
		1	Conducting Endoscopic
09/10/91	US 5,047,026) /	Retrograde Sphincterotomy
V7/1U/YI	03 3,047,020	Mark A. Rydell	Electrosurgical Implement For
:00/10/01	110 5 0 47 005		Tunneling Through Tissue
09/10/91	U\$ 5,047,027	Mark A. Rydeli	Turnor Resector

10/07/91	Bipolar Laparoscopic Cholecystectomy	Dr. Olsen	Bipolar Laparoscopic
	Lecture		Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
01/28/92	US 5,084,044	Robert H. Quint	Apparatus for Endometrial Ablation and Method of Using Same
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
04/28/92	US 5,108,391	Gerhard Flachenecker, Karl Fastenmeier, Heinz Lindemneier	High-Frequency Generator For Tissue Cutting And For Coagulating In High- Frequency Surgery
06/16/92	US 5,122,138	Kim H. Manwaring	Tissue Vaporizing Accessory and Method for an Endoscope
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus
12/15/92	US 5,171,311	Mark A. Rydell, David J. Parins, Steven W. Berhow	Percutaneous Laparoscopic Cholectectomy Instrument
03/30/93	US 5,197,963	David J. Parins	Electrosurgical Instrument with Extendable Sheath for Irrigation and Aspiration
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

In addition, Smith & Nephew may rely on the findings of fact made by Judge William H. Orrick in his Memorandum Decision and Order dated December 1, 1998, in which he found that there was "a substantial question as to whether claim 28 of the '882 patent is invalid for obviousness in light of the Roos '198 patent and the Elsasser and Roos article." Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

U.S. Patent No. 5,224,592 B1: Claim 1

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
00/00/76	Acta Medicotechnica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 – 134	E. Elsasser and E. Roos	Uber ein Instrument zur leckstromfreien transurethralen Resection (Concerning An Instrument for Transurethral resection without leakage of current)
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
01/07/77	2 313 949/ N 76 17587	Siegfried Hiltebrandt et Ludwig Bonnet	Boucle de sectionnement a une ou deux branches pour resertoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
04/26/83	US 4,381,007	James D. Doss	Multipolar Corneal- Shaping Electrode with Flexible Removable Skirt
06/00/85	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurbiers, BSc, Nicolaas Bom, Ph.D. Patrick W. Serruys, MD, Geert T. Meester, MD, FACC	Vaporization of Atherosclerotic Plaques by Spark Erosion
04/28/87	US 4,660,571	Stanley R. Hess, Terri Kovacs	Percutaneous Lead Having Radially Adjustable Electrode
06/23/87	US 4,674,499	David S.Ç. Pao	Coaxial Bipolar Probe
11/22/88	US 4,785,823	Philip E. Eggers, Robert F. Shaw	Methods And Apparatus For Performing In Vivo Blood Thermodilution Procedures
00/00/89	SPIE Vol. 1068 Catheter-based	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback

	Consinue de Proces		
	Sensing and Imaging		1
00/00/89	Technology		
00/00/89	The Organizing	Robert Tucker and	A Bipolar Electrosurgical
′	Committee of the 7 th	Stefan Loening	Turp Loop
	World Congress on		
	Endourology and		
	ESWL Foundation for		
	Advancement of		
2.460	International Science		
04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical
00/10/01	770 5 047 006		Instrument
09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement
			For Tunneling Through
10/07/91	D: T	7 01	Tissue
10/0//91	Bipolar Laparoscopic	Dr. Olsen	Bipolar Laparoscopic
	Cholecystectomy		Cholecystectomy
01/14/92	Lecture		
02/18/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/18/92	US 5,088,997	Louis Delahuerga,	Gas Coagulation Device
		Robert B. Stoddard,	1
03/24/92	110 6 000 421	Michael S. Klicek	
05/12/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
05/12/92	US 5,112,330	Shinichi Nishigaki,	Resectoscope Apparatus
04/28/92	US 5,108,391	Shiro Bito Gerhard Flachenecker,	Wiel F
04/20/92	03 3,100,391	Karl Fastenmeier, Heinz	High-Frequency Generator
	1	Lindenmeier	For Tissue Cutting And For Coagulating In High-
		rugeimeter	. – – . ,
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo	Frequency Surgery Blood Coagulating
1444172	0.3 3,107,033	Ninomiya	Apparatus
05/04/93	US 5,207,675	Jerome Canady	Surgical Coagulation
υφ. υπ γφ	3,201,013	Jordino Canady	Device
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic
U-11 20 7-4	ورهروبرد و و	raciala i . Licenti	Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman.	Catheter Having Electrode
	,,	Wilton W. Webster, Jr.	With Annular Recess and
		THOM TO WOUSE, JI.	Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter
			And Method For
			Resolving Artherosclerotic
			Plaque By Radio
		•	Frequency Sparking
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Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

U.S. Patent No. 5,224,592 B1: Claim 23

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PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
00/00/76	Acta Medicotechnica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 – 134	E. Elsasser and E. Roos	Uber ein Instrument zur leckstromfreien transurethralen Resection (Concerning An Instrument for Transurethral resection without leakage of current)
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
01/07/77	2 313 949/ N 76 17587	Siegfried Hiltebrandt et Ludwig Bonnet	Boucle de sectionnement a une ou deux branches pour resertoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
06/00/85	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurbiers, BSc, Nicolaas Bom, Ph.D, Patrick W. Serruys, MD, Geert T. Meester, MD, FACC	Vaporization of Atherosclerotic Plaques by Spark Erosion
04/28/87	US 4,660,571	Stanley R. Hess, Terri Kovacs	Percutaneous Lead Having Radially Adjustable Electrode
00/00/89	SPIE Vol. 1068 Catheter-based Sensing and Imaging Technology	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback
00/00/89	The Organizing Committee of the 7th World Congress on Endourology and ESWL Foundation for Advancement of International Science	Robert Tucker and Stefan Loening	A Bipolar Electrosurgical Turp Loop

00/20/03	170 6 0 6 0 0 0 0 0 0		~
09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement For Tunneling Through Tissue
10/07/91	Bipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsen	Bipolar Laparoscopic Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/18/92	US 5,088,997	Louis Delahuerga, Robert B. Stoddard, Michael S. Klicek	Gas Coagulation Device
03/24/92	US 5,098,431	Mark A. Rydell	RF Abiation Catheter
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
04/28/92	US 5,108,391	Gerhard Flachenecker, Karl Fastenmeier, Heinz Lindenmeier	High-Frequency Generator For Tissue Cutting And For Coagulating In High- Frequency Surgery
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus
05/04/93	US 5,207,675	Jerome Canady	Surgical Coagulation Device
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

Smith & Nephew further contends that claims 1 and 28 of U.S. Patent No. 5,697,882 are invalid under 35 U.S.C. § 112 because the specification of U.S. patent No. 5,697,882 does not describe the manner and process of making and using the alleged invention, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same. Rather, undue experimentation would be necessary to successfully practice the claimed apparatus. In addition, Smith & Nephew

may rely on the findings of fact made by Judge William H. Orrick in his Memorandum Decision and Order dated December 1, 1998, in which he concluded that there was a substantial question that claim 1 of the '882 patent is invalid for lack of enablement.

Smith & Nephew also contends that claim 28 of U.S. Patent No. 5,697,882 and claim 1 of U.S. Patent No. 5,224,592 B1 are indefinite, and therefore invalid under 35 U.S.C. § 112.

Smith & Nephew's investigation into its defenses is continuing, and it may assert additional invalidity defenses as discovery progresses.

Dated: December 9, 2001

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CERTIFICATE OF SERVICE

I hereby certify that on this _____ day of December, 2001, a true and correct copy of the within document was caused to be served on the attorneys of record at the following addresses as indicated:

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